I CLAIM:

1. An apparatus for suturing tissue, comprising

a curved suture needle having a radius of curvature; and

a suture control apparatus comprising a pair of needle guides separated by a space and a locator surface in the space between the needle guides for engagement with tissue to receive a suture, said needle guides providing substantially the same radius of curvature as the radius of curvature of said suture needle, the space between said needle guides and the location of said locator surface being selected to define the depth of the suture through tissue pressed against the locator surface in the space between the needle guides when the curved suture needle is passed through the needle guides and the tissue.

2. The apparatus of claim 1 wherein the curved needle guides have lengths of a small fraction of an inch.

3. The apparatus of claim 1 wherein the needle guides are curved and formed by lengths of tubing.

4. The apparatus of claim 3, wherein the cross-section of the curved suture needle and the cross-sections of the passageways of the curved tubular guides are non-circular.

5. The apparatus of claim 4, wherein the cross-sections of the curved suture needle and of the passageways of the curved needle guides are polygonal.

6. The apparatus of claim 5, wherein the cross-sections of the curved suture needle and of the passageways of the curved needle guides are triangular.

7. The apparatus of claim 3, wherein the cross-sections of the curved suture needle and the passageways of the curved needle guides include a portion formed by a straight line.

8. The apparatus of claim 1, wherein the locator surface is curved.

9. The apparatus of claim 8, wherein the locator surface has substantially the same radius of curvature as a human eyeball.

10. The apparatus of claim 1 wherein the pair of needle guides and locator surface are carried by a handle.

11. The apparatus of claim 10 wherein the pair of needle guides are located at the ends of a pair of needle guide arms pivotally carried by the handle adjacent the locator surface, and wherein a fastener forms an axle on which the pair of needle guide arms are pivotally carried and permits adjustment of the angle between the needle guide arms and the space between the needle guides.

12. The apparatus of claim 11 wherein each of the pair of needle guide arms includes a slot in which the fastener is located and wherein the fastener also permits adjustment in the lengths of the needle guide arms.

13. The apparatus of claim 10 wherein the handle includes a slot adjacent the locator surface, wherein the pair of needle guides are carried by a fastener located within the slot, and wherein the fastener permits adjustment of the location of the needle guides with respect to the location surface

14. The apparatus of claim 13 wherein each of the pair of needle guides is carried at the end of a needle guide arm and the pair of needle guide arms are pivotally carried by the fastener.

15. The apparatus of claim 14 wherein each of the pair of needle guide arms includes a slot at its end distal from the needle guide and the fastener is located within the slot of the needle guide arm permitting adjustment of the lengths of the needle guide arms.

16. The apparatus of claim 13 wherein each of the pair of needle guide arms includes a slot at its end distal from the needle guide and wherein the fastener is located in the slots of the needle guide arms, permitting adjustment in the lengths of the needle guide arms.

17. The apparatus of claim 10 wherein at least one of the needle guides is carried by a needle guide arm with a slot therein and wherein a fastener is carried by the handle and located within the slot of the needle guide arm and permits adjustment of the position of the needle guide.

18. A method of providing sutures having a predetermined depth of penetration in tissue, comprising

providing a curved suture needle having a radius of curvature and an attached suture material;

providing a suture control apparatus for the curved suture needle comprising a pair of curved needle guides separated by a space with a locator surface at a pre-selected site in the space between the pair of curved needle guides, said curved needle guides having the substantially same radius of curvature as the curved suture needle;

pressing the locator surface of the suture controller apparatus against tissue to receive a suture, and locating the pair of curved needle guides adjacent the portion of the tissue to receive the suture;

threading the suture needle and suture material through the pair of curved needle guides and the tissue therebetween to provide a suture having a predetermined depth of penetration of the tissue determined by the radius of curvature of the suture needle, the distance across the space between the pair of curved needle guides and the location of the locator surface.

19. The method of claim 18, wherein the cross-section of the curved suture needle and of the cross-sections of the passageways of the curved needle guides are non-circular.

20. The method of claim 19, wherein the cross-sections of the curved suture needle and of the passageways of the curved needle guides are polygonal.

21. The method of claim 19, wherein the cross-sections of the curved suture needle and of the passageways of the curved tubular needle guides are triangular.

22. The method of claim 18, wherein the locator surface is curved.

23. The method of claim 22, wherein the locator surface has substantially the same radius of curvature as a human eyeball, and is pressed against the outside surface of the eyeball to provide a suture through the tissue of the eyeball having a limited depth of penetration.

24. The method of claim 18 wherein the pair of curved needle guides include slots and the suture central apparatus is manipulated, after application of a suture to tissue, to remove the suture material from the suture control apparatus through the slots.

25. An apparatus for suturing tissue, comprising

a curved suture needle having a radius of curvature; and

a suture control apparatus comprising a pair of curved needle guides that are formed from slotted tubing that is a small fraction of an inch in length and separated by a space, and a locator surface in the space between the curved needle guides for engagement with tissue to receive a suture, said curved tubular needle guides and said curved suture needle having substantially the same radius of curvature, the radius of curvature of said suture needle, the space between said curved tubular needle guides and the location of said locator surface being selected to define the depth of the suture through tissue pressed against the locator surface in the space between the curved tubular needle guides when the curved suture needle is passed through the curved needle guides and the tissue.

26. The apparatus of claim 25, wherein the cross-section of the curved suture needle and the cross-sections of the passageways of the curved tubular needle guides are non-circular.

27. The apparatus of claim 26, wherein the cross-sections of the curved suture needle and of the passageways of the curved needle guides include a portion formed by a straight line.

28. The apparatus of claim 25, wherein the locator surface is curved and has substantially the same radius of curvature as a human eyeball.

29. The apparatus of claim 25, wherein the cross-section of the curved suture needle and of the passageways of the curved needle guides are trapezoidal.